

CENTRAL INTELLIGENCE AGENCY
INFORMATION REPORT

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COUNTRY East Germany

REPORT

SUBJECT Special Tube Production at VEB Werk fuer Fernmeldewesen (WF)

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This is UNEVALUATED
 Information

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THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
 THE APPRAISAL OF CONTENT IS TENTATIVE.
 (FOR KEY SEE REVERSE)

1. By the end of 1954, the development branch of VEB Werk fuer Fernmeldewesen (WF) had completed its work on the following tubes and turned them over to the production department:

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- a. 3 kilowatt VHF tetrode
- b. 50 kilowatt transmitter and impulse-amplifying tube
- c. 20 kilowatt triode
- d. Transmitter tube for 500 mcs.
- e. Blocking tubes LG 76, 79, and 80
- f. Impulse magnetron 730¹
- g. Gas-filled, double-grid thyatron
- h. 80 watt transmitter tube
- i. 10 cm magnetron LMS 1000¹
- j. 250 watt magnetron¹
- k. Reflex klystron 707 B
- l. Broadcast tube EF 80
- m. " " PY 81
- n. Push-pull tetrode QOE 06/40 (= SRS 4451)²

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2. Development of the following tubes had also been completed, but no orders issued for them to go into production:

- a. Klystron 726 A
- b. " 726 B (with special cathode) (Several more laboratory specimens are to be built)
- c. Broadcast tube 6 AF 6
- d. " " 6 AJ 4
- e. High-output VHF transmitter tube RS 1003 (= SRS 551). Output 160 watt; at 3 to 4 meters, 100 watts; cut-off wave-length 2.5 m.
- f. End-stage travelling-wave tube - the pilot series is to be completed by the end of 1956 and the tube will then be handed over to the production department. Accordingly, it will not be available until 1957.

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(NOTE: Washington distribution indicated by "X"; Field distribution by "#".)

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3. Development of the low noise-level travelling-wave tube is not complete; its completion is expected during 1955 and the pilot series will be built during 1957.³
4. The following tubes are to be developed during 1955 (this includes those carried forward from 1954):

- a. 300 kilowatt transmitter triode
- b. Decimeter triode (pencil tube) for battery-powered sets
- c. Broadcast tubes for wave-lengths down to the decimeter range FCC 84 and PCF 82
- d. Thyatron with cold cathode
- e. Hydrogen thyatron
- f. Low noise-level travelling-wave tube (see para 3 above)
- g. Rare gas thyatron
- h. Stabilizer 150 C 2
- i. 1 megawatt impulse-amplifying tube
- j. 50 kilowatt water-cooled short-wave tube
- k. 50 kilowatt air-cooled short-wave tube
- l. 300 watt triode
- m. Power klystron (Leistungsklystron)
- n. 1.5 cm travelling-wave tube
- o. 7.5 cm travelling-wave tube
- p. Carcinatron (travelling-wave tube working as vibration-producer)
- q. Amplifying triode 40 C 2 for the centimeter range
- r. Cathode ray tube with square screen, 5" x 5 "
- s. " " " " " " 14" x 14" and 17" x 17"
- t. " " " " " " 21" x 21"
- u. Oscillograph tube
- v. Mains multiplier (Netzvervielfacher)
- w. QQE 03/20
- x. E 81 L⁴

5. A small run of transistors is to be built to replace the production of VEB Werk fuer Bauelemente der Nachrichtentechnik "Carl von Ossietzky", Teltow, which has been cancelled.
6. At the beginning of the year the tube development department was reorganized into the following sections: broadcast tubes; gas-filled tubes; transmitter tubes; cathode ray tubes; transistors.
7. Early in December 1954 a new regulation was issued under which a pilot series cannot be produced in the plant until the permission of the Ministry of Machine Construction has been obtained. This will only be given when the corresponding number of orders has been received, thus effectively preventing the demonstration of a new development by a pilot series.⁵

- 1. Comment. VEB Funkwerk Koepenick has been enquiring about the supply of magnetrons for radar purposes. 25X1
- 2. Comment. [] previously called [] an impulse magnifier; 25X1
now [] a push-pull tetrode. 25X1
- 3. Comment. The travelling wave tubes are intended for the planned decimeter directional television links, but none has yet taken delivery. 25X1
- 4. Comment. These are being developed on the plant's own initiative, i.e., without any order having been placed. We do not know what they are. 25X1

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5. Comment. The only tubes of which the plant has supplied to the Soviet authorities during the last two years were a series of decimeter tubes.

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